

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

LISTING OF CLAIMS:

Claims 1-10 (canceled).

Claim 11 (currently amended): A handling device for electronic chip components, comprising:

an accommodating device having a plurality of cavities arranged to put electronic chip components thereinto; and

a feeder arranged to supply the electronic chip components to the accommodating device; wherein

the feeder includes a transport surface arranged to transport the electronic chip components towards the plurality of cavities, and a feeding section arranged to feed the electronic components into the plurality of cavities;

the accommodating device is arranged to move such that at least one of the cavities is successively disposed at a location which is in close proximity to the feeding section of the feeder;

on the transport surface of the feeder, the electronic chip components are supported on only one side surface thereof, without fixing an orientation of a length direction of the electronic chip components; ~~and~~

the electronic chip components are put directly into the cavities from the feeding section of the feeder by providing suction in the cavities from a cavity side;

the feeder includes a sidewall at a peripheral edge of the transport surface;

the sidewall includes an opening portion; and

the opening portion in the sidewall is blocked by a cavity formation surface in which the cavities of the accommodating device are provided.

Claim 12 (original): A handling device for electronic chip components as claimed in claim 11, wherein the feeder is a circulatory feeder in which the electronic chip components can be moved freely with any orientation thereof and the electronic chip components can be put into the cavities in a free order.

Claim 13 (original): A handling device for electronic chip components as claimed in claim 11, wherein, when the electronic chip components are put into the cavities from the feeder, the electronic chip components are directly put into the cavities without being moved along a main surface of the accommodating device.

Claim 14 (original): A handling device for electronic chip components as claimed in claim 11, wherein the accommodating device is a rotating disk-shaped device having a main surface, and the cavities are disposed so as to be located close to the feeder as a result of rotation thereof.

Claim 15 (original): A handling device for electronic chip components as claimed in claim 14, wherein the accommodating device is disposed so that its rotation axis is in a substantially horizontal position.

Claim 16 (original): A handling device for electronic chip components as claimed in claim 14, wherein the transport surface of the feeder has a descending inclination relative to the accommodating device and the main surface of the accommodating device is inclined such that an angle between the main surface of the accommodating device and the transport surface of the feeder increases.

Claim 17 (original): A handling device for electronic chip components as claimed in claim 14, wherein the main surface of the accommodating device is inclined such that an angle between the main surface of the accommodating device and the transport surface of the feeder increases.

Claim 18 (previously presented): A handling device for electronic chip components as claimed in claim 14, wherein end portions of the electronic chip components put or waiting to be put into the cavities of the accommodating device protrude to the transport surface of the feeder.

Claim 19 (currently amended): A handling device for electronic chip components as claimed in claim 11, further comprising an obstacle arranged to ~~disperse the electronic chip components being transported by the feeder such that~~ limit a density of electronic chip components near the cavities of the accommodating device ~~has to~~ to a predetermined value.

Claim 20 (original): A handling device for electronic chip components as claimed in claim 11, wherein electrical characteristics of the electronic chip components put into the cavities are measured.

Claim 21 (currently amended): A handling device for electronic chip components, comprising:
an accommodating device having a plurality of cavities arranged to put electronic chip components thereinto; and
a feeder arranged to supply the electronic chip components to the accommodating device; wherein

the feeder includes a transport surface arranged to transport the electronic chip components towards the plurality of cavities, and a feeding section arranged to feed the electronic components into the plurality of cavities;

the accommodating device is arranged to move such that at least one of the cavities is successively disposed at a location which is in close proximity to the feeding section of the feeder;

on the transport surface of the feeder, the electronic chip components are freely oriented in a width direction and a thickness direction thereof and are supported on only one side surface thereof, without fixing an orientation of a length direction of the electronic chip components; and

the electronic chip components are put directly into the cavities from the feeding section of the feeder by providing suction in the cavities from a cavity side;

the feeder includes a sidewall at a peripheral edge of the transport surface;

the sidewall includes an opening portion; and

the opening portion in the sidewall is blocked by a cavity formation surface in which the cavities of the accommodating device are provided.

Claim 22 (original): A handling device for electronic chip components as claimed in claim 21, wherein the feeder is a circulatory feeder in which the electronic chip components can be moved freely with any orientation thereof and the electronic chip components can be put into the cavities in a free order.

Claim 23 (original): A handling device for electronic chip components as claimed in claim 21, wherein, when the electronic chip components are put into the cavities from the feeder, the electronic chip components are directly put into the cavities without being moved along a main surface of the accommodating device.

Claim 24 (original): A handling device for electronic chip components as claimed in claim 21, wherein the accommodating device is a rotating disk-shaped device having a main surface, and the cavities are disposed so as to be located close to the feeder as a result of rotation thereof.

Claim 25 (original): A handling device for electronic chip components as claimed in claim 24, wherein the accommodating device is disposed so that its rotation axis is in a substantially horizontal position.

Claim 26 (original): A handling device for electronic chip components as claimed in claim 24, wherein the transport surface of the feeder has a descending inclination relative to the accommodating device and the main surface of the accommodating device is inclined such that an angle between the main surface of the accommodating device and the transport surface of the feeder increases.

Claim 27 (original): A handling device for electronic chip components as claimed in claim 24, wherein the main surface of the accommodating device is inclined such that an angle between the main surface of the accommodating device and the transport surface of the feeder increases.

Claim 28 (previously presented): A handling device for electronic chip components as claimed in claim 21, wherein end portions of the electronic chip components put or waiting to be put into the cavities of the accommodating device protrude to the transport surface of the feeder.

Claim 29 (previously presented): A handling device for electronic chip components as claimed in claim 21, further comprising an obstacle arranged to disperse the electronic chip components being transported by the feeder such that a density of

electronic chip components near the cavities of the accommodating device has a desired value.

Claim 30 (original): A handling device for electronic chip components as claimed in claim 21, wherein electrical characteristics of the electronic chip components put into the cavities are measured.

Claim 31 (currently amended): A handling device for electronic chip components, comprising:

an accommodating device having a plurality of cavities arranged to put electronic chip components thereinto; and

a feeder arranged to supply the electronic chip components to the accommodating device; wherein

the feeder includes a transport surface arranged to transport the electronic chip components towards the plurality of cavities, and a feeding section arranged to feed the electronic components into the plurality of cavities;

the accommodating device is arranged to move such that at least one of the cavities is successively disposed at a location in close proximity to the feeding section of the feeder, and the electronic chip components are made to float in air by a floating unit of the feeder and, by providing suction in the cavities from a cavity side, the electronic chip components in the air are put directly into the cavities;

the electronic components are arranged in an arbitrary orientation on the transport surface of the feeder;

the feeder includes a sidewall at a peripheral edge of the transport surface;

the sidewall includes an opening portion; and

the opening portion in the sidewall is blocked by a cavity formation surface in which the cavities of the accommodating device are provided.

Claim 32 (original): A handling device for electronic chip components as claimed in claim 31, wherein the feeder is a circulatory feeder in which the electronic chip components can be moved freely with any orientation thereof and the electronic chip components can be put into the cavities in a free order.

Claim 33 (original): A handling device for electronic chip components as claimed in claim 31, wherein, when the electronic chip components are put into the cavities from the feeder, the electronic chip components are directly put into the cavities without being moved along a main surface of the accommodating device.

Claim 34 (original): A handling device for electronic chip components as claimed in claim 31, wherein the accommodating device is a rotating disk-shaped device having a main surface, and the cavities are disposed so as to be located close to the feeder as a result of rotation thereof.

Claim 35 (original): A handling device for electronic chip components as claimed in claim 34, wherein the accommodating device is disposed so that its rotation axis is in a substantially horizontal position.

Claim 36 (original): A handling device for electronic chip components as claimed in claim 34, wherein the transport surface of the feeder has a descending inclination relative to the accommodating device and the main surface of the accommodating device is inclined such that an angle between the main surface of the accommodating device and the transport surface of the feeder increases.

Claim 37 (original): A handling device for electronic chip components as claimed in claim 34, wherein the main surface of the accommodating device is inclined such that

an angle between the main surface of the accommodating device and the transport surface of the feeder increases.

Claim 38 (previously presented): A handling device for electronic chip components as claimed in claim 31, wherein end portions of the electronic chip components put or waiting to be put into the cavities of the accommodating device protrude to the transport surface of the feeder.

Claim 39 (original): A handling device for electronic chip components as claimed in claim 31, further comprising an obstacle arranged to disperse the electronic chip components being transported by the feeder such that a density of electronic chip components near the cavities of the accommodating device has a desired value.

Claim 40 (original): A handling device for electronic chip components as claimed in claim 31, wherein electrical characteristics of the electronic chip components put into the cavities are measured.

Claim 41 (currently amended): A handling device for electronic chip components comprising:

- an accommodating device having a plurality of cavities arranged to put chip-type electronic components thereinto;

- a transport portion arranged to transport the electronic chip components to the cavities in the accommodating device;

- a first suction block having a transport passage linked to the transport portion and arranged to put the electronic chip components into the transport passage by a suction operation;

- a feeder arranged to supply the electronic chip components to a location in close proximity to an entrance of the transport passage of the suction block;

and a second suction block arranged to put the chip-type electronic components into the plurality of cavities by providing suction in the cavities from a cavity side; wherein

the feeder is a circulatory feeder in which the electronic chip components move freely with any orientation thereof in a free direction and the electronic chip components are supplied to the transport passage of the suction block in a free order;

the feeder includes a sidewall at a peripheral edge of the transport surface;

the sidewall includes an opening portion; and

the opening portion in the sidewall is blocked by a cavity formation surface in which the cavities of the accommodating device are provided.

Claim 42 (currently amended): A handling device for electronic chip components, comprising:

an accommodating device having a plurality of cavities arranged to put electronic chip components thereinto; and

a feeder arranged to supply the electronic chip components to the accommodating device; wherein

the feeder includes a transport surface arranged to transport the electronic chip components towards the plurality of cavities, and a feeding section in the feeder arranged to feed the electronic components into the plurality of cavities;

the accommodating device is arranged to move such that at least one of the cavities is successively disposed at a location which is in close proximity to the feeder;

the feeder is a circulatory feeder in which the electronic chip components move freely with any orientation thereof and the electronic chip components are supplied to the cavities in a free order; ~~and~~

the electronic chip components are directly put into the cavities from the feeder without being moved along a main surface of the accommodating device by providing suction in the cavities from a cavity side;

the feeder includes a sidewall at a peripheral edge of the transport surface;

the sidewall includes an opening portion; and

the opening portion in the sidewall is blocked by a cavity formation surface in which the cavities of the accommodating device are provided.

Claim 43 (canceled).

Claim 44 (currently amended): A handling method for electronic chip components, comprising the steps of:

providing an accommodating device having a plurality of cavities;

providing a feeder arranged to supply the electronic components to the accommodating device including a transport surface arranged to transport the electronic chip components towards the plurality of cavities, and a feeding section arranged to feed the electronic components into the plurality of cavities; and

putting electronic chip components into the accommodating device from the feeder; wherein

by performing a suction operation in at least one cavity disposed at a location which is in close proximity to the feeder, the electronic chip components are put directly into the cavities from the feeder without being moved along a main surface of the accommodating device;

the electronic components are transported in an arbitrary orientation on the transport surface of the feeder;

the feeder includes a sidewall at a peripheral edge of the transport surface;

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the sidewall includes an opening portion; and
the opening portion in the sidewall is blocked by a cavity formation surface
in which the cavities of the accommodating device are provided.